Chehalis River Basin Flood Authority

Reducing Flood Damage <u>and</u> Restoring Aquatic Species

Town of Bucoda

November 12, 2024

2007 Storm

\$938M Basin-wide damage, \$300M lost economic activity (WA).



Exit 77 (I-5) in Chehalis STEVE RINGMAN / SEATTLE TIMES



City of Centralia STEVE RINGMAN / SEATTLE TIMES





MIKE

AP

State Route 6, West of Adna

SALSBURY /



Photos Source: LEWIS COUNTY, DIVISION OF EMERGENCY MANAGEMENT 2 of 22

Today's Presentation

- Describe the "Flood Authority" #1 -- Local Projects #2 -- Flood Warning System
- Touch on the "Chehalis River Basin Flood Control Zone District" #3 -- Proposed Flow-through Dam for Flood Control
- Allow time for discussion.



CHEHALIS RIVER BASIN FLOOD CONTROL ZONE DISTRICT





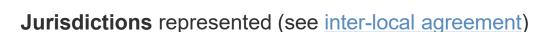


Chehalis River Basin Flood Authority

- Formed in 2008
- Focused on flood hazard mitigation

Decision-making

- informed by science
- protective of Basin residents/communities
- environmentally appropriate



- ➢ Grays Harbor County (2008) ➢ Lewis County (2008)
 - City of Aberdeen (2008)
 City of Centralia (2008)
 - City of Cosmopolis(2011) City of Chehalis (2008) 0
 - City of Hoquiam (2017)
 City of Napavine (2011)
 - City of Montesano (2008)
 - City of Oakville (2008)

- - Town of Pe Ell (2008)



Town of Bucoda (2008) 0



Help local communities identify, develop, implement local flood hazard reduction solutions.

4 of 22



Local Projects (#1)

- 1. Reduce flood damage.
- 2. Protect people, property, infrastructure.
- 3. Improve readiness, response, resiliency.
 - Drinking Water (Boistfort, Bucoda).
 - Wastewater (Montesano, Pe Ell).
 - *Emergency Response* (Grays Harbor County, Chehalis-Centralia Airport).
 - *Regional Economic Infrastructure* (Montesano, Port of Chehalis, Port of Grays Harbor).
 - Community Protection (Aberdeen, Adna, Bucoda, Centralia, Chehalis, Chehalis Tribe, Hoquiam, Oakville).

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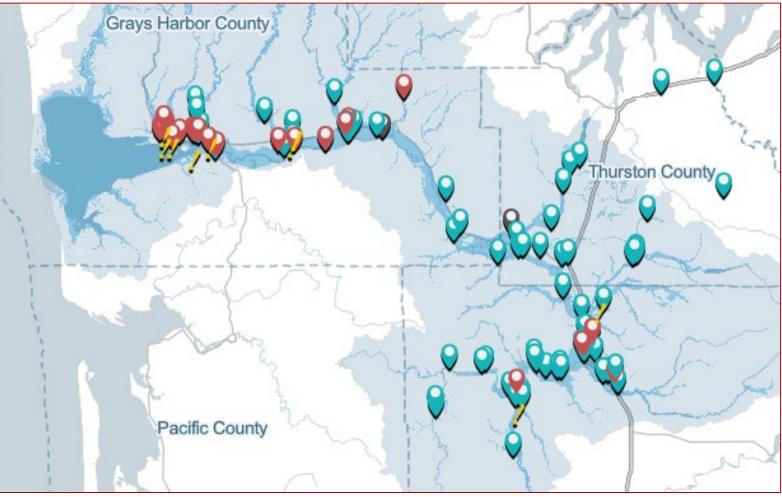
Flood Warning (Basin-wide).

State Capital Budget:
2012-13 \$ 5.0M
2013-15 \$10.7M
2015-17 \$15.7M
2017-19 \$ 9.6M
2019-21 \$ 6.3M
2021-23 \$ 4.1M
2023-25 <u>\$_3.6M</u>
<mark>\$55.0M</mark>
2025-27 \$ 3.0M
to
\$13.0M

Local Projects (100+ Projects Completed 2012-23)

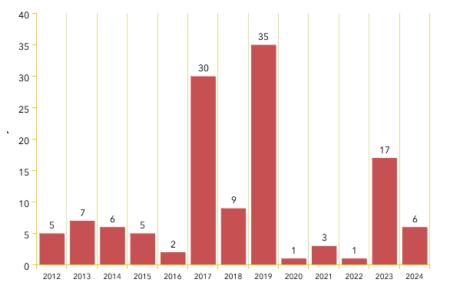


Local Projects (100+ Projects Completed 2012-23)

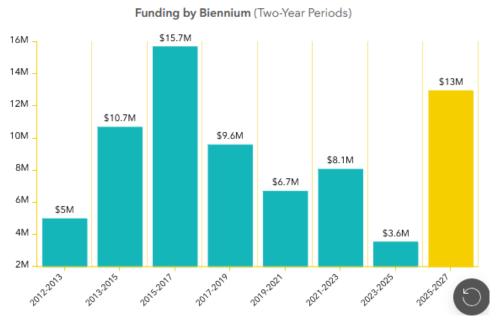




Local Projects (100+ Projects Completed 2012-23)



Projects Completed by Year





Local Projects (Bucoda)

COMPLETED 2014 Drinking Water Protection Levee – Read more.





ON-HOLD 2016 Main Street Regrade Project – Read more (and here).

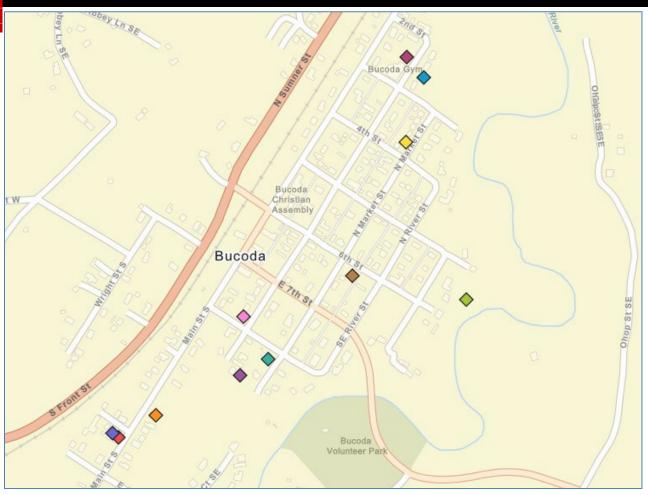


COMPLETED 2016 Foundation Flood Opening Pilot (11 properties) – Read more (and here)

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Oity Bucoda				State WA	29	^{code} 98530
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d) Engineered flood oper					gineered flood open	
					M) INFORMATION	
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53067C0485	E	09/02/1981	1 10	16/2012	AE	255.0'
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Indicate elevation datam				SNAD 1988	DEher/Sourcec.	Citizen Mit Ma
2. Is the building located in a				r Otherwise Prote	icted Area (OPA)?	Tes 20 No
Designation Date: 0						
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Local Projects (Bucoda)

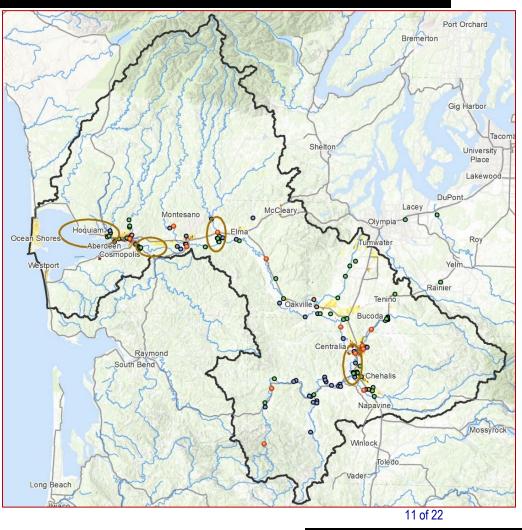




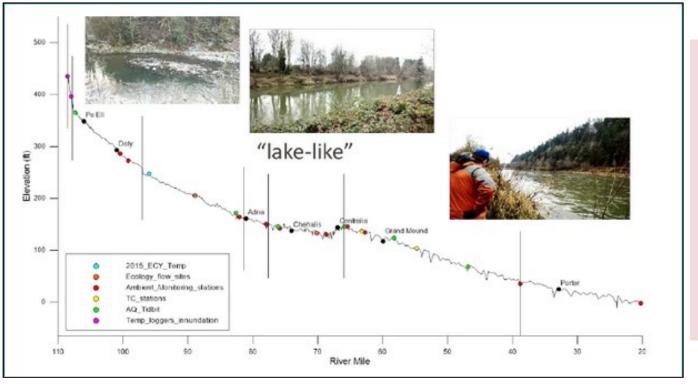
2016 Properties -- Foundation Flood Openings Pilot

10 of 22

Identify future local projects through geographically-based, coordinated local investment planning.







Basin Geography

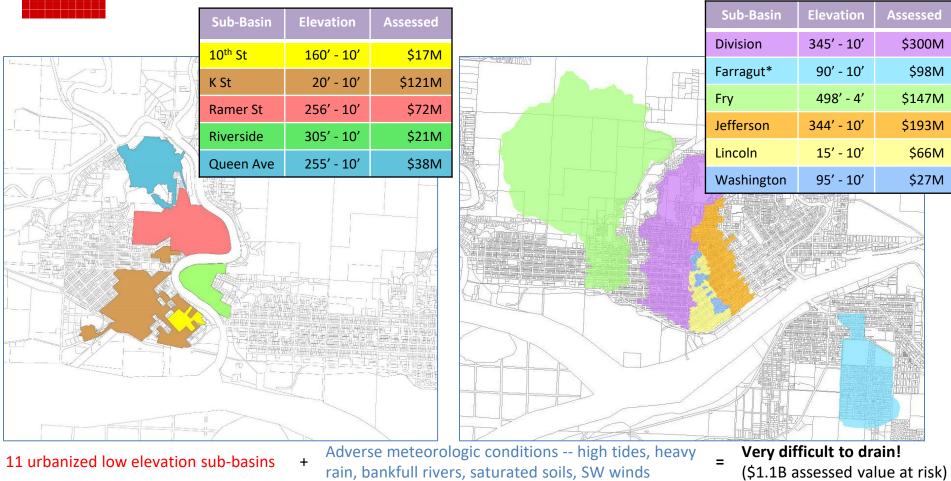
Upper = Steep, narrow, fast flowing.

Middle = Flat, "lake like", slow to drain.

✓ Lower = Flat, coastal, <u>difficult to drain</u>.

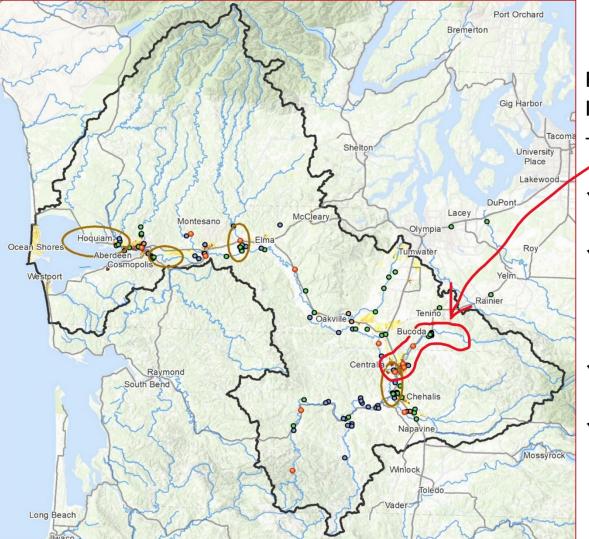
Shah, Mohammad. (2021). inland water-dynamics and ecology. 10.5772/intechopen.87463.







13 of 22

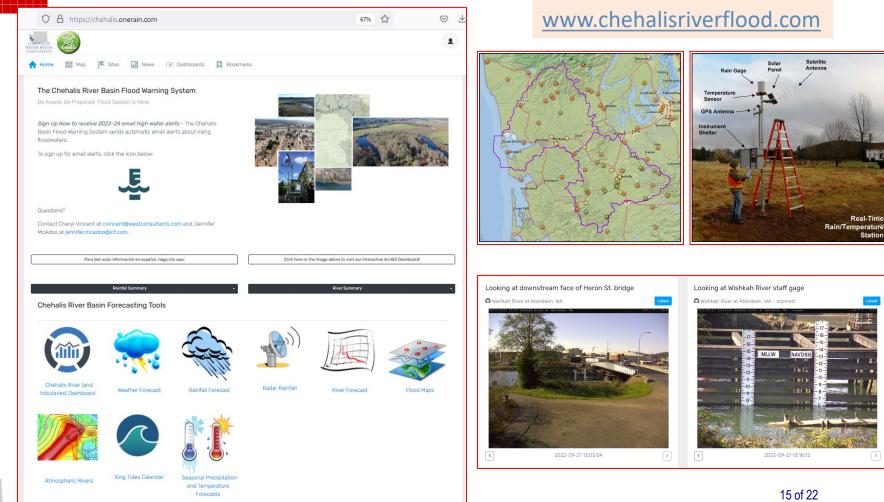


Future Geographic Investment Planning -- <u>Skookumchuck</u>.

- ✓ New gage (<u>here</u>).
- ✓ Future of
 Skookumchuck
 dam (<u>here</u>).
- ✓ Bucoda flooding.
- ✓ Centralia flooding.

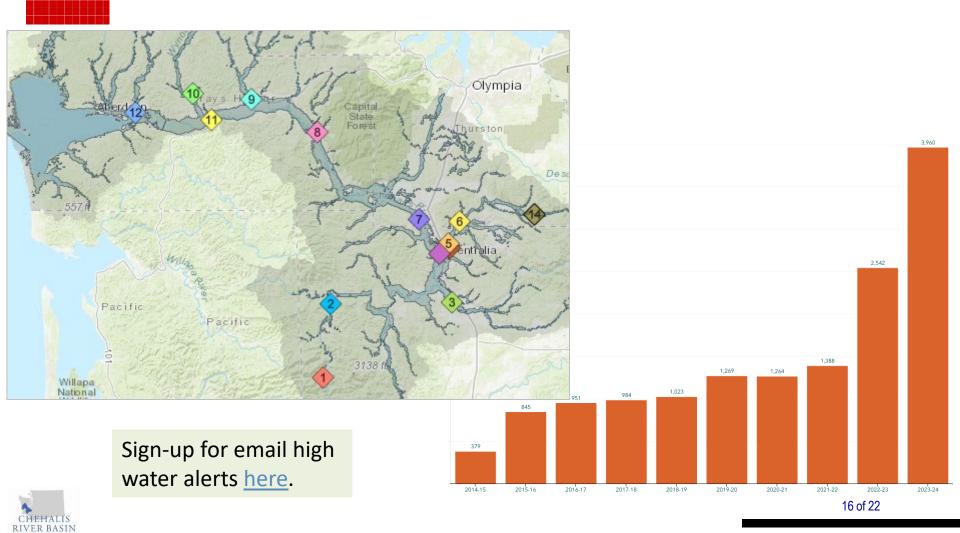
- Developed with State Capital Budget \$.
- ✓ Maintained with local \$.

Flood Warning System (#2)



CHEHALIS RIVER BASIN FLOOD AUTHORITY

Flood Warning System (Alert Sign-Ups)



FLOOD AUTHORIT

Proposed Flow-through Dam for Flood Control (#3)

ABOUT THE DISTRICT

The Chehalis River Basin Flood Control Zone District works to make the basin a safer place for communities impacted by flooding. The District's goals are to:



The District is proposing a flow-through dam for flood control as a flood risk solution that serves the needs of fish, preserves the riverine ecosystem, and protects communities.

↓ Event Calendar

Upcoming Events

OCTOBER 10

Chehalis River Basin FCZD Advisory Committee meeting

Oct 10, 2024, 8:00 AM -9:00 AM

Commissioners' Hearing Room 351 NW North St. Chehalis, WA 98532

OCTOBER 15

Chehalis River Basin FCZD Supervisor meeting

Oct 15, 2024, 11:00 AM -12:00 PM

Commissioners' Hearing Room 351 NW North St. Chehalis. WA 98532

NOVEMBER 14

Chehalis River Basin FCZD Advisory Committee meeting

Nov 14, 2024, 8:00 AM -9:00 AM

Commissioners' Hearing Room 351 NW North St. Chehalis, WA 98532

CHEHALIS RIVER BASIN FLOOD CONTROL ZONE DISTRICT

www.chehalisriverbasinfczd.com



Proposed Flow-Through Dam for Flood Control (#3)



Move
 through
 unobstructed
 ✓ Water
 ✓ Fish
 ✓ Sediment

2. Delivers topto-bottom benefit, Pe Ell to Cosmopolis.

3. See recent presentation <u>here</u>.







Office of Chehalis Basin Chehalis Basin Board

https://chehalisbasinstrategy.com/



Community leaders, Chehalis and Quinault tribal representatives, local and state government liaisons



VFR

FLOOD AUTHORIT

Office of Chehalis Basin

Small team within the WA Department of Ecology

"Network of Partners"

appoints 3 member

Organizations and local entities who turn ideas into shovel-ready reality



Chehalis Basin Strategy (Network of Partners)



Local Resolutions Library

https://www.ezview.wa.gov/site/alias 1492/37643/local_resolutions.aspx

Today vs 2007

Today, we are substantially more aware, better prepared for catastrophic flooding than ever before.

- \checkmark We have a state-of-the art flood warning system.
- ✓ We've completed many cost-efficient local projects and habitat projects.
- ✓ We're serving people, local governments, emergency responders, agriculture, fish, and habitat alike
- ✓ We have a governance, administrative, and funding structure that's delivering results, and is committed to a balanced basin-wide flood and fish solution (see Local Resolution Library).



https://chehalisbasinstrategy.com /office-of-chehalis-basin/

Key Contacts

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